QTC Magazine

May 2025

The Radio Amateur Society of Australia

60 Metres - Truth Not Speculation

VK9XU/CU Dxpedition

This Is Amateur Radio Update

GMT UTC and 24 Hour Clocks

And more ...

QTC is a free resource published by RASA

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Contact: **info@vkradioamateurs.org**
Website: **http://vkradioamateurs.org**

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Alan VK6CQ

Contributing Items For QTC Magazine

QTC Magazine welcomes contributions for future editions. When planning to submit an article, please read our submission guidelines first.

Following the guidelines will save you and the editing team a lot of time and effort. The guidelines are **HERE**

From the President

Paul VK2APA

Is Amateur Radio Entertainment?

You may have heard about the ACMA seeking your thoughts on suggested updates to the Amateur LCD, including a proposal to lift the ban on licensees transmitting or sharing any type of entertainment.

The question is what is the motivation for this change?

A little history

The early pioneers of radio were curious about the medium, with some focusing on the distance they could communicate while others were keen on designing and building the equipment. After the advent of Radio Telephony, these innovators began to delight audiences by broadcasting music through the airwaves.

I will not repeat the great work by others and suggested reading can be found at the end of this article.

Later there was the separation of Amateur Radio from Professional Radio. Tim Mills (SK) VK2ZTM wrote in his article titled “A History of Amateur Radio New South Wales”

> “*The 1920's saw the rise of 'broadcasting' and commercial interests began to compete with the Experimenters for the control of the Wireless Institute, in particular in NSW. While the professional and broadcasting interests had developed the Institute of Radio Engineers (IRE) they wanted the 'amateurs' out of the WIA.”*

Big business recognised the opportunities radio offered for both entertainment and advertising, leading to new regulations in Australia in 1923 that differentiated between the use of radio spectrum by amateur radio experimenters and commercial broadcasters.

Now this distinction is becoming blurred – Is this a good thing or a bad one?

The Question is – What passes as entertainment on Amateur Radio?

Many of us have had amusing banter with fellow amateurs and some of the Australian HF nets are full of entertaining characters who discuss everything from the weather to their ailments.

A number of Amateurs produce podcasts and video, made available on the internet and a change to the LCD may benefit them and their audience reach.

A few amateur news services feature snippets of music to highlight or seperate news items. However, once the audio is transmitted through amateur equipment designed for voice, fidelity is compromised and it can become distorted, and the voice may be lost. An exception I’m aware of is the Amateur Radio NSW news broadcast, which uses commercial AM transmitters along with professional audio processing on the 40M and 160M bands.

Amateur Television Repeater VK3RTV transmits the occasional technical video and their website states, “All video seen on VK3RTV is sent by radio amateurs when time and inclination permits. Video is of a technical nature and NOT for entertainment.”.

Community Radio already offers the opportunity for those with an interest in radio entertainment to participate.

Do the suggested changes allow me to strum my Ukulele (Heaven Forbid) and share my music with you on the amateur bands? Could a community broadcaster transmit their shows on the Amateur bands? And what about copyright issues?

There is a great deal to consider.

References and Further Reading:

Remaking the Amateur Licence Conditions Determination - April 2025

https://www.acma.gov.au/consultations/2025-04/remaking-amateur-licence-conditions-determination

“The Magic Spark – 50 years of Radio in Australia” 1973 by RR Walker

“Australian Radio History An in-depth study into the development of A.M. broadcasting throughout Australia” by Bruce Carty Ph.D.

https://austamradiohistory.com

Australian Old Time Radio **www.australianotr.com.au**

Radio Heritage Foundation **https://www.radioheritage.com**

“A History of Amateur Radio New South Wales” – by Tim Mills VK2ZTM (SK)

VK3RTV Melbourne Amateur TV **Group http://www.vk3rtv.com**

QTC
From the Editor

Why do magazines have Editorials?

The primary purpose of an editorial is to tackle current or recent events and formulate viewpoints based on objective analysis. Ideally, an editorial should be all about balance, but this does not mean a well written editorial should not take a considered position on issues of the day.

An editorial may also provide a synopsis of the major stories or articles in the journal, usually accompanied by relevant commentary.

Perhaps the most important part of an editorial, and of being an editor, is to comply with some basic editorial principles.

We can look to government sources for guidance:

https://www.abc.net.au/edpols

Let's focus on a few key policy principles:

Independence, integrity and responsibility

It is our position that QTC maintains independence. This means that whilst we are the magazine of RASA, our editorial team retains the right to publish (or not) material they feel warrants attention. Integrity and responsibility are about "doing the right thing" and taking ownership of our material.

Accuracy

Our editorial team commits to accuracy in everything we do. We undertake research and ensure that articles provide verifiable references where required. If a claim is made in a QTC article, you can be confident of its veracity.

Of course mistakes can occur, and where mistakes are identified, we'll provide a correction at our next opportunity.

Impartiality and diversity of perspectives

If we are writing or reviewing an article, we do it with impartiality. This means we take the article at face value and then proceed to check facts and references. When we review an opinion piece or research article, we will always consider the broader perspective, the views of others and ensure that we encourage as much diversity as possible. If we criticise a specific issue or position, we will always provide reasoning.

Fair and honest dealing

This shouldn’t require an explanation. Regrettably, like broader societal issues, we are seeing less than honest reporting and dealings in sections of the community. At QTC, we have no intention of entering into a race to the bottom, but all of our articles (be they research, entertaining, technical or opinion pieces) will be fair and honest. Of course, if we see inaccurate news or misleading news, we will report it. We believe our readers deserve the truth.

Privacy

If you wish to write an article for QTC and maintain your privacy, that’s not a problem. We have a clear policy at QTC regarding privacy. If an author believes they may be subjected to bullying, virtual or physical harm or any form of unfair vilification, we will publish the article without naming the author.

Sometimes news in amateur radio is contentious and/or disappointing. Rather than hide the complete truth, we will always do our best to keep our readers informed. All too often, we hear (or don’t) about activities with the regulator and/or international bodies that are incomplete or misleading. Where we see these instances, we’ll undertake the research and let our readers know.

We would ask our readers not to shoot the messenger in these instances. Rather than making grandiose statements on social media, send us an email and ask for more information. If the matter relates to the WIA, write to them. Getting angry on social media doesn't help anyone. Calling people names doesn’t help.

So, when you read an article in QTC, we hope you better understand the role the editorial team has taken. Our articles are factual, independently verified, and any opinions or statements are qualified. Whilst the motivation for this editorial has been the 5 MHz story, we want our readers to better understand how things work at QTC more generally.

Finally, if you ever have any questions about QTC or our editorial processes, please send us an email. Equally so, if you have an idea for a story but don't know where to start, just ask.

73, Chris VK3QB & Bob VK6POP, QTC Editorial Team

The Radio Amateur Society of Australia

5MHz in Australia - Let's puts the record straight

The March/April issue of the WIA's Amateur Radio Magazine contains an emotionally charged response to RASA's release of 16 February, which provided hitherto unknown facts around why Australia does not yet have access to the 5 MHz band.

The article opens with:

> *A "news release" posted online mid-February by an online radio amateur splinter group, titled The enemy within, made some concerning accusations about why Australian radio amateurs are denied access to the global 5 MHz band (also known as 60 metres). Promoted via amateur radio social media sites, the unattributed news release opened with the claim that: "The WIA made a deal with the Defense (sic) and the ACMA which included denying all Australian amateurs access to the 5 MHz band.*

Let's be clear.

The article was written by a RASA member and reviewed by the Editorial Team and the RASA Committee. To protect individuals from harassment, QTC has a policy of withholding author details where we believe the individual is at risk.

It is also noted that RASA is a registered National body recognised by ASIC and the ACMA. RASA was formed by a group of disaffected WIA members – concerned the WIA no longer represented its members or the broader AR community effectively. We don't need to comment on what we achieve with an annual operating budget of less than $4,000 per year, but WIA members should be demanding answers as to where their $95 goes each year.

RASA's results speak for themselves.

The author continues…

> *"Normally, I would not respond to such unsubstantiated, erroneous claims that misrepresent the situation regarding the 60 metre band. However, in this case I think it is necessary to respond."*

Let's be clear again. Every claim in the article is substantiated and referenced. So this faux outrage is really quite childish. Did the author actually read our articles?

In addition, on the 24th February 2025, the RASA President wrote to the WIA President with documents verifying facts presented in our article, and asking for his feedback. None has been received. An informal phone call with the WIA President on the 21st February 2025 suggested he had no knowledge of these negotiations at WRC-15. Given it was ten years and four Presidents ago, that is probably not unreasonable, but he made it clear it would be a priority to investigate.

The author then states in bold face

> *"This article corrects the errors and makes clear the facts."*

Let's review and comment on the key points.

Key Point 1 - Processes

The first point relates to the process followed by representative bodies and regulators in the lead-up to WRC-15. This is a good summary. The WIA was the only Australian representative organisation present as RASA did not exist in 2015. It is also important to know that the IARU only permits one national body from each country to be a member. The WIA is Australia's representative body as a matter of history, not competence or recent performance. We acknowledge that the WIA has done very good work for us all since its formation – but not a great deal in the last 10-15 years.

Key Point 2 – Claims RASA published falsehoods

The author of the WIA article states:

> *"To start with the most important issue: the news release commentary states: "The WIA made a deal with the Defense and the ACMA which included denying all Australian amateurs access to the 5 MHz band."*
>
> *This is completely false. There was not and is not any such agreement. The release further claims: "Mr Dale Hughes chaired the IARU Drafting Committee for WRC15 with Australian Defence and ACMA representatives where the decision was made to indefinitely block Australian Amateur access to the 5 MHz band."*
>
> *Again, a falsehood. There never was any such committee decision."*

No-one is suggesting a committee decision was made. The question posed relates to a "deal" (or whatever word readers wish to use) made between ACMA, DoD and the VK/WIA Representative prior to Australia's "consensus" permitting Amateurs to use 5 MHz. This "deal" has been confirmed by the Minister's office and conversations with the ACMA.

The author then provides further background relating to ITU, and preparatory work for WRC.

We invite both the author and readers to review our article and the references used to substantiate our statements. Again, we shared considerable information with the WIA President before publishing our article. At no point has the WIA been in contact with us to discuss these matters.

The author concedes any challenge to the draft text may have severely impacted the final outcome. We agree that compromise is an important part of consensus driven decision making.

Key Point 3 - Post WRC-15.

This section concluded with this puerile statement:

> *"To date, the WIA is the only group that attends the meetings on behalf of Australian amateurs. Splinter groups are nowhere to be seen."*

We assume the author is referring to RASA. We are bemused by the fact that some

within the WIA are incapable of uttering our name, instead referring to us as “the splinter group”, or “the Online Radio Club”. They would be well advised to consider why National Bodies fail and why alternative associations are created.

Our respective results, both financial and real-world outcomes tell the story. The WIA President understands. Unfortunately, some around him do not share his vision or desire to see the WIA rebuild and focus on its stated objectives.

Of course, jealousy, vilification, and loss of vision and strategy result when hatred prevails. RASA is not seen at IARU meetings as we are not members. We have explained the reasons for this earlier in this article.

It is also worth noting we invited the WIA to participate in our 2x1 Contest Callsign committee in 2018/19 but they didn’t even extend the courtesy of an acknowledgement, let alone advising us of their disinterest. And we know how that ended. RASA successfully negotiated this new privilege for Australian contesters. At the time it was loudly celebrated, even by the WIA, although they didn’t have the good grace to acknowledge RASA’s leadership in the outcome. We were referred to as a “stakeholder”.

We have invited the WIA to join us in various initiatives since, including QRM Guru, of which one QRM Guru developer won a WIA Award for Technical Excellence. But this was only after Scott Williams became President.

Key Point 4 – Process and Mistakes

We have no doubt that participation in international working groups takes a lot of time, costs money, and requires patience and consideration. And we applaud all volunteers who commit their own time and energy to these efforts. It is both sad and unfortunate that their supporting body is unable to follow through with targeted efforts focused on the things that matter the most to the majority of Amateurs.

RASA does understand regulatory processes and we believe we target our limited resources where they matter most. And this is demonstrated in the resources and achievements we have delivered since our formation in 2018.

We noted all the related licensees on the 60 metre band in our publications and correspondence with the ACMA. Our proposals have been and will continue to be sensitive of other band users, including Defence.

We note the author states :

> *“One final correction to the errant news release. The unnamed author states: “Since WRC-15 over 250 countries have been granted access to 5 MHz.” That is a curious comment given that ITU membership is only 193 sovereign states and there are 195 recognised countries in the world, according to the United Nations.*
>
> *Who are the other countries ?”*

We stand corrected and thank the author for pointing out our error. A common mistake in our hobby. The correct nomenclature should have been “over 250 DXCC entities have been granted access to 5 MHz”. A quick review of Clublog illustrates 17 Amateurs have claimed over 250 DXCC entities on 60 Metres, and 250 Amateurs have over 186 DXCC entities.

Rank	Callsign	60	DXCC ▼	Slots	Range
1	N0FW	273	**273**	273	29 yrs
2	OZ8ABE ★	267	**267**	267	34 yrs
3	DJ6YX	262	**262**	262	30 yrs
4	ON7GB	261	**261**	261	33 yrs
5	CT1EEB	260	**260**	260	37 yrs
6	HA5WA	259	**259**	259	43 yrs
7	W4DXX+1	259	**259**	259	55 yrs
8	SP5CJQ	258	**258**	258	47 yrs
9	EA1PO	257	**257**	257	30 yrs
10	W4DR	256	**256**	256	74 yrs
		60			
11	S58N	256	**256**	256	25 yrs
12	SP5EWY	255	**255**	255	54 yrs
13	9A4T+2	254	**254**	254	13 yrs
14	SP2GJV	253	**253**	253	51 yrs
15	EA2DP+1	252	**252**	252	25 yrs
16	KG4W+1	251	**251**	251	48 yrs
17	SP7CDG	250	**250**	250	58 yrs

200 Amateurs have 75 or more DXCC and 1,323 have achieved 100 DXCC.

1309	KC1BUF	100	**100**	100	55 yrs
1310	DG9FFM	100	**100**	100	30 yrs
		60			
1311	DJ6OI+1	100	**100**	100	25 yrs
1312	DK0AE	100	**100**	100	18 yrs
1313	HB9ACA	100	**100**	100	48 yrs
1314	IK2OLD	100	**100**	100	14 yrs
1315	PG7R	100	**100**	100	4 yrs
1316	DB7CA	100	**100**	100	6 yrs
1317	IZ5ILJ ★	100	**100**	100	19 yrs
1318	SV3FUO+3	100	**100**	100	24 yrs
1319	K4YJ	100	**100**	100	46 yrs
1320	OH6NEQ	100	**100**	100	40 yrs
		60			
1321	EA2BHE	100	**100**	100	31 yrs
1322	DH0KAI	100	**100**	100	31 yrs
1323	F5MSE	100	**100**	100	28 yrs
1324	4X1UF+3	99	**99**	99	60 yrs

Nowhere in this WIA Amateur Radio Magazine article has the author offered any explanation for the “in perpetuity” agreement that was framed in 2015.

The Editorial Team of QTC and the Committee of RASA stand by the articles we have written in QTC and published on our website. We have (again) written to the President of the WIA requesting a discussion over this article and the ongoing divisive stance some within the WIA continue to take. No-one wins. We refer to an oft used saying attributed to Albert Einstein: “insanity is doing the same thing over and over and expecting different results”.

In our case we will continue to seek collaboration with the WIA as we believe it is best for the sector in both the short and long term.

In closing, it is both unfortunate for the WIA and its strong and proud history, and also for its members, that the Boards of recent times have refused to open a channel of communication with RASA. The serving President, Scott Williams VK3KJ has tried on at least two or three occasions, but we can only conclude he has been muted or “shut down” by his board. This is an assumption, and we welcome Scott to make a public statement on this important matter.

We will continue to follow the vision and purpose that lead to the formation of RASA back in 2018.

For clarity, let’s provide some definitions:

Deal - an agreement entered into by two or more parties

Consensus - a general agreement between parties representing broad or shared understanding.

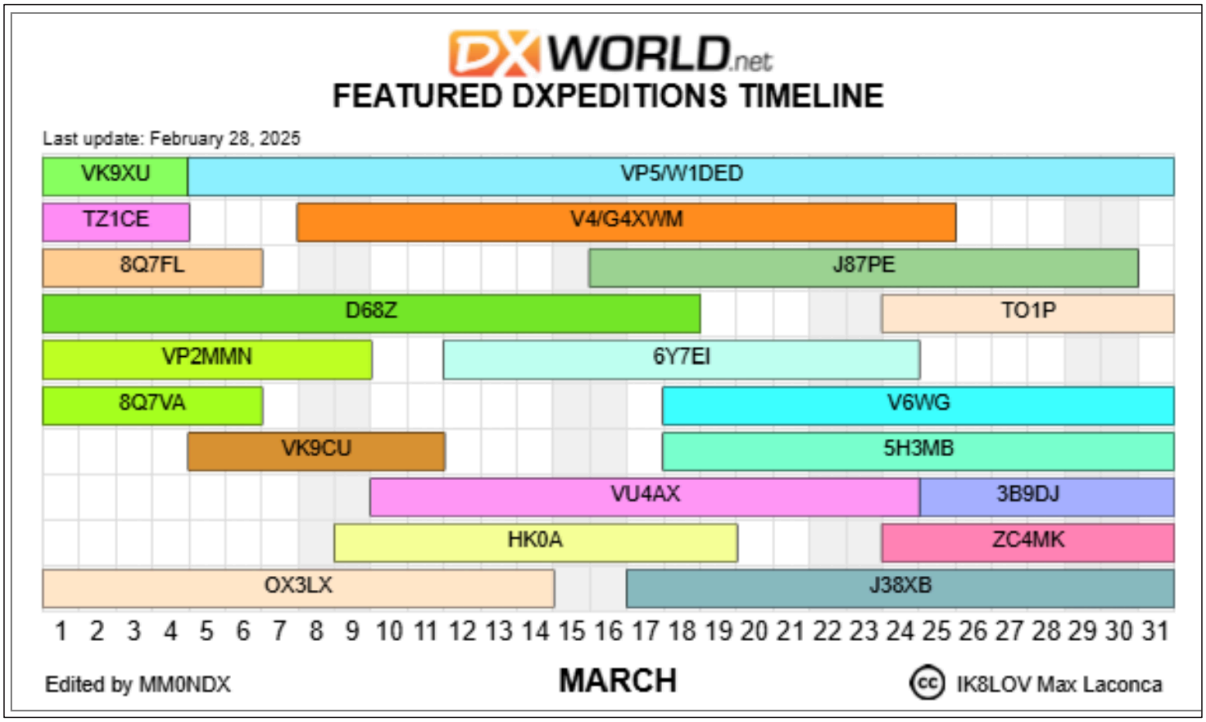
Vote [in this context] - used to express a wish to follow a particular course of action.

The bottom line is the RASA article did not mislead!

RASA’s release on 5MHZ can be read HERE

DX Happenings

We start with the usual monthly report from DX-World. Click the image for more info.



Local news

Working TX9A - the old fashioned way

By Chris VK3QB

On 26th April I was spinning the dial on the TS-520S when I heard a bit of a pileup around 7.025kHz. My TS-520S is stock, not even a narrow CW filter. It took a few minutes to find his transmit frequency and work out he was listening up about 2 kHz.

It took another few minutes to remember how to work “split” on a 47 year old radio with a 2.4 kHz filter, one VFO and an RIT knob. And with no memory keyer or even a Bug; my straight key was still plugged in from the ANZAC Day Straight Key event.

I listened to TX9A for a little while to tune my ear, then spun the VFO dial up a couple to hear a guy working him. I then flicked on the RIT and quickly tuned that down about 2 and tuned his signal to my ear.

I waited for his CQ and then called. It took two calls, but I got him.

Now that was fun. Probably five-minutes end-to-end with the initial set-up time and additional thinking effort. I'm not sure I'd want to run a DXpedition pile-up that way, or have a run in CWT (CW Test by cwops.org) but it sure was a fun walk down memory lane.

In the log: TX9A 26 April 2025 0719Z 7.025 kHz 599 599

By contrast, Phil VK3VB worked TX9A a little later this same day;

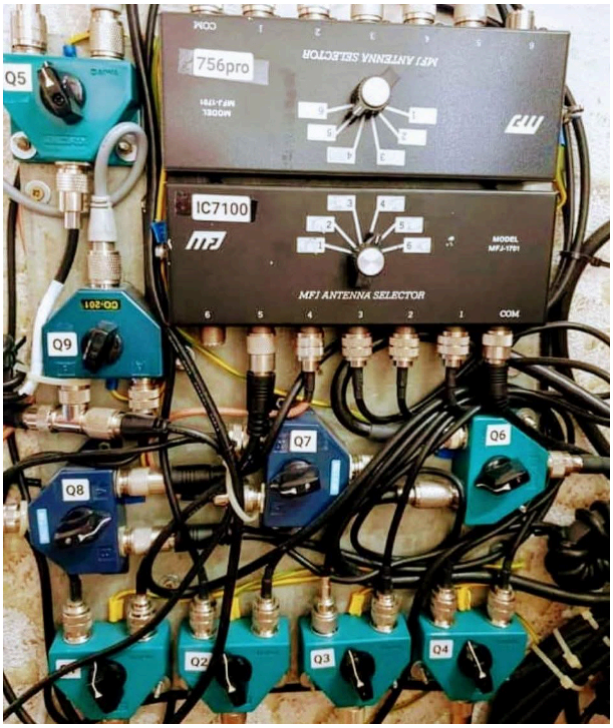
"At the other end of the technology scale, I worked them about 30 minutes later, sitting in the lounge-room remotely accessing the FTDX101D - decoding by ear. I use WIN4YAESU on the shack PC to control the radio. Audio is sent using VBAN and Teamviewer to remote in."

TX9A should be a relatively easy one for most of us in VK, especially on the East Coast. It looks like an experienced team and they're planning to activate all bands. Even 60 metres… that's right, just another country (DXCC Entity) with 60 metre access.

Read more here: https://austral2025.com/

If you have a story about some DX you worked please let us know.
Email info @ vkradioamateurs.org

Managing more than one Antenna



Do you have more than one radio and more than one antenna?

ER1SKI, Octavian Scerbatchi's Amateur Radio Station wrote: I have 5 antennas and 3 transceivers, so this setup allows me to connect everything I need. 👍 Lightning protection with 5 DAIWA switches as quick disconnect antennas.

(Photo by er1ski on Ham Radio Facebook, thanks)

VK9XU – Christmas Island 18th February – 4th March 2025

By Alan VK6CQ

It was 9:00 a.m. Tuesday morning 18th February and myself, Steve VK6SJ & his XYL Julie were pushing trolleys of heavy baggage around in the hustle & bustle of Perth International Airport.

We were soon joined by DXpedition leader Günter DL2AWG, team members Elmar DF4GV, Heye DJ9RR, Rainer DL2AMD and XYLs Rosie, Uta & Eleonora as one by one, they each appeared out of the International Arrivals Hall pushing even bigger piles of baggage in front of them to be checked-in for the 4½ hour flight to Christmas Island.

The German contingent had just flown in from Bangkok but unfortunately, not all their baggage had flown in with them and we were missing the squid poles and hardware for Elmar's low band antennas as well as the mast for the hexbeam. Enquiries at the Thai Airways desk soon confirmed the missing baggage was still in Thailand, which meant it would be at least another week before there was any chance of seeing it at Christmas Island, so Steve made a quick dash back home for some extra squid poles to tide us over. Not only that, but one of the German team member's SPE linear had been quite badly damaged in transit and the owner was not at all happy.

Christmas Island time is an hour behind Perth and we arrived at around 4:30pm. It took a fair while to get all our bags through local quarantine inspection, sort out the car-hire then make several trips to & from the airport to ferry everyone and everything to the Divers' Villa which was to be the VK9XU QTH for the next fortnight; so by the time we'd finished, it was well gone 6pm and getting dark already. The Divers' Villa is a traditional wooden 'stilt house'

THE DIVERS' VILLA – VK9XU QTH

with an internal veranda that slept ten. Recently renovated, it even included an espresso coffee machine that saw constant service for the next 14 days.

Nevertheless, VK9XU was quickly on the air using Alan's rapid-deploy FT8 station (Icom IC-7000 & Terlin multi-tap HF whip antenna) whilst everyone else had an early night. It had been a very long day, especially for the Germans who had been travelling close to 48 hours by this time. Come sunrise and Alan was close to achieving DXCC and had several hundred stations in the log already. He then continued operating FT8 on 10, 12 & 15 metres whilst the rest of the team got the DX Commander, 30m J-pole and 17m/12m vertical rhombic antennas erected and the three sets of main station equipment set up on a very heavy-duty wooden table in the living room.

VK9XU IN ACTION. L-R: Elmar DF4GV, Rainer DL2AMD, Steve VK6SJ

By 9 am, there were two complete *Flex* linear stations and a *Yaesu* FT-DX10 plus a *Juma* PA1000+ linear up and running. We were now operating three stations 24/7 via a variety of antennas: The *Yaesu* FT-DX10 dedicated mostly to CW, plus the two Flex radios sharing the SSB and FT8 duties. The rapid-deploy rig then went QRT and Alan wandered off bleary-eyed for a shower and a few hours' sleep.

Steve had kindly lent the DXpedition a large amount of *Flex* equipment which had been transported up to Christmas Island and Cocos-Keeling Islands separately by ship several weeks previously, so it was already there ready and waiting for us to simply 'Plug & Play'. Most of us had no prior hands-on experience of setting up and operating *Flex* gear, so it was a very steep learning curve indeed and just as well that Steve has a very patient personality! Certainly very different from operating more conventional radios for sure, but once you know your way around them, then *Flex* radios really are a dream to operate, almost akin to driving a Rolls-Royce!

As well as being leader of our group, Günter was also '*Herr Log-Meister'* and kept an eagle-eye on the German 'UCX-Log' logging & CW keying software that we were using as well as our Internet connection to Club Log Live. Very impressive and reliable software indeed and certainly an equal to the well known N1MM logging program.

There were only six operators, so that meant a very full-on schedule and the agreed operating plan was a roster system of five hours on, five hours off. This is OK for a few days, but after a while the circadian rhythms start to get all confused. Fortunately, were joined a few days later by Zeljko VK6VY as he and XYL Dragana also happened to be holidaying on the Island. Zeljko is a well respected SSB contest operator and he took over one of the shifts each day as a sorely-needed guest operator, enabling one of the other operators to enjoy an occasional full ten hours away from the radios to catch up on some sleep or go for a bit of a wander somewhere and do some sightseeing.

One thing you quickly notice at Christmas Island are the feral chickens; never mind the Island's famous little red crabs - there are wild chooks everywhere as well! Not only chooks, but there's also some real *monster* crabs lurking out there in the rainforest covering most of the Island and some of them looked like they could easily double up as cable-cutters or remove one of your fingers!

Next day, Elmar & Rainer got the 30m J-Pole operational and Steve was able to use his local business contacts to borrow a couple of sturdy 3-metre sections of lattice mast that the hexbeam could be mounted on; so with a bit of a team effort, we had that up and running pretty quickly as well, which also gave us a 6 metre capability.

Having been on a fair few myself, seems to me that one of those unwritten laws of DXpeditions is that someone nearly always suffers some kind of accident. In our case it was Elmar who had a nocturnal disagreement with the DX Commander guy wires one night which resulted in a sprained wrist and a fairly bad scrape to one of his knees. Fortunately it didn't require stitches and a visit to the local pharmacy for some antiseptic ointment and large sticking plasters was all that was necessary, although he was left with a painful looking limp for the next few days.

The second weekend, a group of us went on a tour of the island's interior with one of the local tour guides – learn about the local phosphate mine, visit the blow-holes on the south coast, see the giant robber crabs in the jungle *etc.* On the way back, we happened across an Abbott's booby in some distress by the side of the road. This is a very rare bird species with a wing span of about two metres that's endemic only to Christmas Island. They roost up in the tree canopy and are unable to take-off from the ground. This one looked like a juvenile that had become exhausted during a trial flight and had opted for a crash-landing on the road so we carefully coaxed it into the back of the minibus and headed straight to the local bird sanctuary where a wildlife ranger gave it the once over. It was just as well we found it when we did as the ranger mentioned there were still a few feral cats roaming the Island and they would most likely have had it for supper! The young booby soon made a full recovery and was back in the air a few days later, so seems DXpeditions are not always the danger to local birdlife that some make them out to be after all!

The missing baggage eventually showed up seven days later on the following Tuesday flight from Perth, so Elmar was finally able to test out the 160/80 metre vertical he'd designed and built, This was a base-fed 18 metre squid pole with a 2m steel rod extension and capacity hat arrangement at the top plus two raised ground radials which had been designed to be an exact λ/4 at the CW end of 80 metres. A homebrew loading coil & capacitor arrangement that Elmar had also designed could be quickly switched in for 160 metres, making band-changes a breeze. It resonated

and performed very well indeed on both bands and gave out quite a few 80 & 160 metres ATNOs over several grey lines and late night/early morning shifts – certainly a testament to some impressive antenna design skills. Elmar had specifically designed his low-band antenna to be lightweight and portable, so might prove popular with future DXpeditions and will no doubt need a name – the '*Elmar-Vert*' maybe, or simply the '*Elvert*'?

Up until now, it had been largely self-catering at the Divers' Villa with the *haus frauen,* Julie, Steve & Alan all turning their hands to various soups, pasta dishes, curries and 'special' cottage pies, so one evening a group of us ventured out to try and find a restaurant that was actually open for business. We failed dismally; plenty of restaurants around, but they were all closed! Christmas Island is definitely not geared up to cater to tourists, that's for sure; but we did come across an open-air cinema with a very prosperous looking Chinese temple next door.

Tuesday 4th March was moving day; all the antennas had to be taken down and everything packed ready for the late afternoon flight to the Cocos-Keeling Islands around 1,000 km further west. The 100 Watt rapid-deploy rig was hooked up to the DX Commander and continued logging FT8 QSOs right up until the last minute as everything else was carefully dismantled, weighed and packed ready for ferrying back up to the airport. Virgin Airlines runs the twice-weekly Perth-Christmas-CocosK service and are notoriously strict on baggage allowances, so particular attention was paid to how much each bag weighed. Even so, we still ended up having to book several lots of excess baggage in order to get everything we needed over to Cocos-Keeling.

VK9CU – Cocos-Keeling Islands 4th – 11th March

Our accommodation for the third and final week was the *Beachcombers* Family Accommodation on West Island, just a short walk from the airport terminal. Another minus thirty minutes time difference and again, it was past sunset by the time we actually got all our bags past quarantine inspection so the DX Commander was quickly deployed in the backyard next to the beach and the rapid-deploy rig was pressed back into service again calling CQ on 15m FT8 to let everyone know that

VK9CU was QRV already. In the meantime, everyone else headed the 200 metres or so back down to the airport bar as Tuesday night is 'Pizza Night' on Cocos-Keeling and we'd all had enough of the Christmas Island 'self-catering experience' for the time being.

The VK9CU QTH was in stark contrast to the old-world charm of the Divers' Villa that had served us so well back on Christmas Island and was a modern family home with all mod cons; same as you'd find in any of Perth's more affluent suburbs. It also had a large front lawn and conveniently backed onto a large grassed area around the back that overlooked the beach so there was plenty of room for all the antennas to go up with a decent amount of spacing in between.

BEACHCOMBERS – VK9CU QTH

All the various antennas soon went up early the following morning. Life on Cocos-Keeling is pretty laid back, to the extent that even the next door neighbour was perfectly happy with Elmar's 160/80m vertical being installed on his front lawn, just so long as the guy wires were festooned with fluorescent safety tape as a hazard warning to anyone walking back home from the pub late at night.

We soon established a rhythm again with the 5 hours on 5 hours off shift routine and with the coffee machine again working overtime. The tail-end of a cyclone was passing nearby and we had a couple of very heavy downpours and a couple of instances in the small hours where the antennas had to be disconnected due to nearby lightning, but apart from that everything ran like clockwork.

VK9CU ANTENNAS – 30M J-POLE & DX COMMANDER

Statistics

These days, DXpeditions seem to be largely judged by their performance statistics. How many bands, how many QSOs, how many

dupes, how many ATNOs and so on. In that respect, both VK9XU and VK9CU performed well above average and well beyond what we were expecting to achieve.

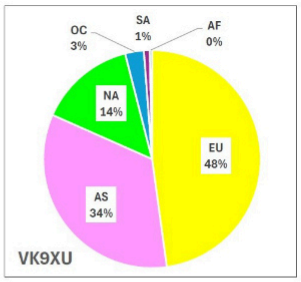
We were active on all bands 160m to 6m and averaged well over 3 QSOs per minute over the 500-odd hours that our three stations were on the air. Sure, we didn't keep everybody happy, but we kept many DXers around the world happy for much of the time, which is about all any DXpeditioner can reasonably expect to do.

So, here's how we did according to *UCX-Log*:

VK9XU

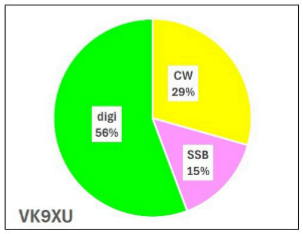
QSOs per band and continent

	Total	1.8	3.5	7	10	14	18	21	24	28	50
EU	27798	111	1101	2213	2718	4326	3516	4646	3837	5330	
AS	19639	424	603	1147	1710	1964	3167	3604	3519	3380	121
NA	8365	3	99	269	716	1163	1813	1629	1549	1124	
OC	1616	25	79	206	136	172	225	306	201	257	9
SA	505		2	46	46	87	81	84	86	73	
AF	193		2	9	18	29	38	31	30	36	



QSOs per band and mode

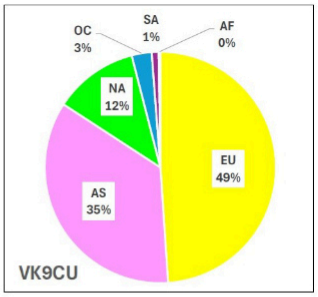
	Total	1.8	3.5	7	10	14	18	21	24	28	50
CW	17090	84	1042	794	1652	1984	1917	3619	2833	3165	
SSB	8658			589		1012	2217	1486	1401	1953	
digi	32381	479	844	2507	3694	4748	4708	5199	4989	5083	130
total	**58129**	**563**	**1886**	**3890**	**5346**	**7744**	**8842**	**10304**	**9223**	**10201**	**130**



VK9CU

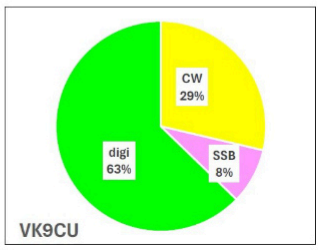
QSOs per band and continent

	Total	1.8	3.5	7	10	14	18	21	24	28	50
EU	17042	29	620	1075	1328	2585	1485	3300	4007	2613	
AS	12275	204	439	628	851	1264	1513	2614	2197	2559	6
NA	4116	13	116	472	517	774	595	847	421	361	
OC	974	24	70	60	64	100	106	212	185	152	1
SA	338		18	53	70	81	34	37	26	19	
AF	81	2	3	10	8	10	11	17	13	7	



QSOs per band and mode

	Total	1.8	3.5	7	10	14	18	21	24	28	50
CW	9983		230	549	863	1245	950	2047	2028	2071	
SSB	2980					408	403	986	619	564	
digi	21863	272	1036	1749	1975	3161	2391	3994	4202	3076	7
total	**34826**	**272**	**1266**	**2298**	**2838**	**4814**	**3744**	**7027**	**6849**	**5711**	**7**

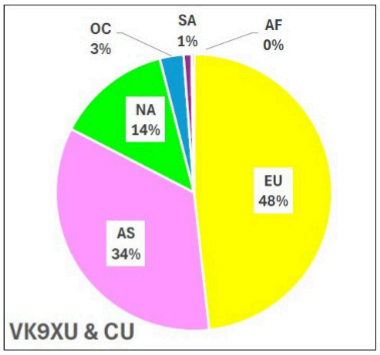


A total of 92,955 QSOs. Another day or so, or slightly better propagation conditions and we'd easily have passed the 100,000 mark. That's a pretty good show in anyone's book, however I prefer to judge a DXpedition's performance or 'success' in more human terms – who I made friends with, what we did, what we learned and most importantly, how much fun we had.

VK9XU & VK9CU (sum)

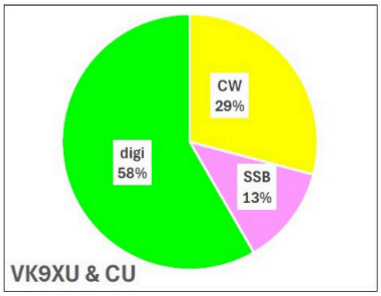
QSOs per band and continent

	Total	1.8	3.5	7	10	14	18	21	24	28	50
EU	44840	140	1721	3288	4046	6911	5001	7946	7844	7943	0
AS	31914	628	1042	1775	2561	3228	4680	6218	5716	5939	127
NA	12481	16	215	741	1233	1937	2408	2476	1970	1485	0
OC	2590	49	149	266	200	272	331	518	386	409	10
SA	843	0	20	99	116	168	115	121	112	92	0
AF	274	2	5	19	26	39	49	48	43	43	0



QSOs per band and mode

	Total	1.8	3.5	7	10	14	18	21	24	28	50
CW	27073	84	1272	1343	2515	3229	2867	5666	4861	5236	0
SSB	11638	0	0	589	0	1420	2620	2472	2020	2517	0
digi	54244	751	1880	4256	5669	7909	7099	9193	9191	8159	137
total	92955	835	3152	6188	8184	12558	12586	17331	16072	15912	137



Günter, Elmar, Heye and Rainer are all very experienced, disciplined and seasoned DXpeditioners who were well-organized and knew how to focus & work together to achieve a common goal - they were really great guys to go play radios with. Sure, it was hard work at times, especially those 2 o'clock in the morning shift changes, but it was *viel Spass*/great fun and we also got to see lots of chooks, crabs and the occasional Chinese temple!

Many thanks to all our sponsors who contributed equipment and/or donated to the DXpedition to help make it happen, especially Steve for all the logistics work he did in the background, his practical solutions to missing items as well as his enduring sense of humour and patience in sorting out all of our various finger-troubles with the *Flex* radios.

Finally, thanks to Julie for her friendly support and '*Vielen Dank*' to Eleonora, Rosie and Uta for all keeping a straight face and not laughing too much whenever they heard me practicing my high-school German!

Alan VK6CQ

Ham College was formed in 2007 with the aim of furthering the hobbies of amateur radio and electronics in Western Australia through the provision of quality education services.

Click **HERE** to visit the website

OQRS Mailing Statistics 2024/2025

As the 2024 – 2025 financial tax year comes to an end, it is time to take a look at how our mailing facility has worked over the last year.

Overall 25,517 items of mail were posted at a cost of £25,972.95. We post QSL Direct cards, Bureau parcels and magazines using the various products as shown in the table below. With 3,419 less items posted this year, with Solar Cycle 25 this last 12 months providing much increased propagation on HF.

DX'pedition QSL costs are very competitive as always and we welcome talking to DX teams about mailing your QSL cards in the future.

The past 12 months though have been challenging as we continue to battle through the minefield of Worldwide Customs, and find our way through letter mailing solutions that are becoming less reliable around the world and more expensive, prices never go down!

While most people use OQRS (Thank you) we still get a number of incoming direct letters. The problem being is that most of the incoming letters do not include the correct QSL costs, because most fail to read either my QSL policy or the DXpedition QSL policy. This increases our costs further and also costs us time as we have to email to let people know that they failed to QSL correctly. My advice is use OQRS ONLY!

Enjoy your DX! We as a team promise to provide you with a QSL service that works for both the DX'er and the DXpedition Team.

		Volume	Net Value	Tax amount	Gross Value
Product			£	£	£
BPL	ROYAL MAIL 1C\2C	7	25.33	0.00	25.33
BPR	ROYAL MAIL SIGNED FOR 1C\2C	1	4.59	0.00	4.59
DE4	INTL Business-NPC-Untracked-PKT	27	237.39	0.00	237.39
DG4	INTL Business-NPC-Untracked-LLTR	2	4.41	0.00	4.41
DP3	INTL Business-PC-Untracked-LTR	11,840	11,493.20	0.00	11,493.20
DP6	INTL Business-PC-Untracked-LLTR	863	1,632.91	0.00	1,632.91
DW1	INTL Standard Sort 2	1	25.92	0.00	25.92
MB1	INTL BUS PARCELS PRINT DIRECT PRIORITY	5	193.32	0.00	193.32
MP1	INTL BUS PARCELS TRACKED ZONE SORT	1	10.55	0.00	10.55
MP5	INTL BUS PARCELS SIGNED ZONE SORT	1	13.82	0.00	13.82
OLA	INTERNATIONAL STANDARD ON ACCOUNT	1	6.75	0.00	6.75
PS5	INTL Business-PC-MaxSort-LTR	8,980	7,283.06	0.00	7,283.06
PS7	INTL Business-PC-MaxSort-LLTR	301	550.49	0.00	550.49
UDO	BARCODE NOT SEEN LETTER 2C VAT E	91	9.88	0.00	9.88
UNH	ACCOUNT 2ND CLASS UNSORTED	3,396	4,481.33	0.00	4,481.33
Overall Result		25,517	25,972.95	0.00	25,972.95

The “This Is Amateur Radio” site (TIAR) has attracted a lot of interest since the launch last month. While the site is under development, more content is being added every week. Each tile represents an area of study or an activity related to Amateur Radio.

There are four groups of tiles. The Blue tiles encompass the subject matter of the Foundation qualification. The Yellow and Green tiles present upgrade content for the Standard and Advanced qualifications respectively. Presently the focus is on the addition of Grey tiles. These encompass activities and studies that are relevant to the hobby, but not necessarily part of the exam process. Work on the Yellow and Green sections will follow.

View Tile list sequentially

We saw the addition of RF Noise Cancellation, Antenna Rotators and Parks on the Air tiles. The Tower & Mast installations page will provide ideas for anyone doing antenna upgrades. Visitors are reminded to check out the View Tile List button. It reveals a list of all the direct links to the content provided so far.

We are working on an expanded introduction to Amateur Radio that will give newcomers insights into what can be achieved within the hobby.

Tell us what you think

This site is a new format intended to reveal the full scope of Amateur Radio in a single view, without burrowing through layers of menus. This has been optimised for PC viewing. Optimisation for tablets and handheld devices will follow when content has progressed further.

Let us know what you think of this presentation style with an email to info@vkradioamateurs.org If you spot errors in typography or content, we’d love to hear from you. If you have relevant content of your own to add to the site, place that in an email as well.

As the TIAR site develops, we’ll keep you updated on new additions and new content.

Elite Communications Advertisement

It’s not a Begali, but….

By Dan Romanchik, KB6NU CWops #1418

(Editor’s note: we often get asked by newcomers for sources of quality keys and paddles that don’t cost the earth. Dan’s article is informative and helpful - we’re reproduced it here with permission from the editor of Solid Copy)

I often get asked by ham friends what key they should buy to get into CW. They are often confused by the wide range of keys out there, and they usually don’t want to spend a lot of oney. In the past, I would scour hamfests looking for used Bencher BY-1s to pass along to them. You used to be able to get them for around $60, but the price has gone up and supply seems to have dried up.

I may have found a good alternate, though, the Putikeeg Auto Morse Keyer Double Oars Telegraph Key CW key (at least that’s what they call it on AliExpress). It’s a decent quality key for beginners—dare I say that it’s better than a BY-1?—and it’s only $80 on Amazon and $73.20 on AliExpress.

The manufacturing quality is excellent. The base and other parts are made from machined aluminum and then anodized. The key is available with blue, red, or brown anodizing. The contacts are brass, and provide a low-resistance contact.

The key comes with a 3.5 mm, three conductor audio cable, and there is a three conductor jack on the back of the key. All I had to do to get it working was unplug the cable from my Begali Magnetic Pro and plug it into the Putikeeg.

The key also comes with two sets of finger pieces: aluminum and plastic. The aluminum finger pieces are a little chintzy, but definitely usable. I don’t like plastic finger pieces, so I didn’t try them out.

Being made mostly from aluminum, the key is fairly light: 14 ounces. Even so, it didn’t move around at all when I placed it on the silicone mat that I use for my keys. If you don’t have a silicone mat, you could put it on a metal surface and the four magnets in the base should hold it in place. Or, you might want to get a hunk of metal to attach it to. Amazon has a bunch of 4x4 jewel er's blocks that probably would work. The cheapest one is $16, and there are quite a few around $20.

Adjustments were easy enough to make. The screws for adjusting the contact spacing have a fine enough thread that setting the contact spacing was easy. I didn’t have to adjust the

magnetic tension (yes, this key has magnetic return) at all, but it seems as though it would be easy enough to do.

Having said all that, the real question is how well does it work in actual operation? My answer is, not bad at all. After getting it all set up, I made a couple of contacts on 40 meters at 25 wpm, with no real snags. I have no complaints at all, except perhaps for the feel of the metal finger pieces. Most beginners aren't going to be quite so fussy, so that's not a big drawback.

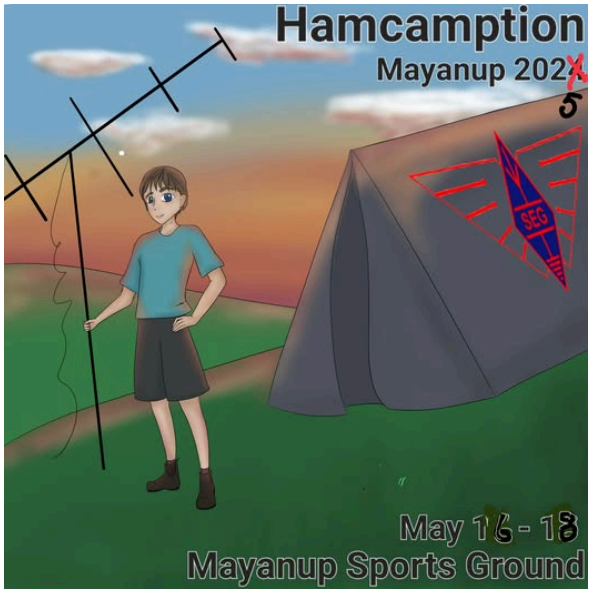
In conclusion, the Putikeeg Auto Morse Keyer Double Oars Telegraph Key CW key is not a Begali, but it would be a good choice for someone just starting out in CW. It's very usable and the price is less than half the price of a new Bencher BY-1 or Begali Simplex. That's the right combination for a new ham starting their CW journey.

Source: Solid Copy, February 2025, page 17 (www.cwops.org)
Reproduced with permission

The Putikeeg Morse Keys website is HERE. Ed.

QRM.GURU is your starting place when you have a problem with QRM, or you just want to find out about how to track down and eliminate QRM. Click HERE to visit the QRM GURU website

Mayanup HamCamption



HamCamption is an activity of Southern Electronics Group.

What is HamCamption? It's a weekend camp-out for radio enthusiasts, where we can set up our portable stations, bring our favourite gadget, or simply socialise.

As its name suggests - it's camping, or caravanning, or swagging.

Location: Mayanup Sports Ground, near Boyup Brook, W.A.

Cost: $10 per person / per night. This goes to the Mayanup Progress Association for the use of their facilities.

We will be running a raffle, to be drawn on Saturday night around dinner time. It's a fund raiser for the club.

It's important that you read the full details of HamCamption **HERE**

VE7SAR Communicator Magazine

The VE7SAR Surrey Amateur Radio club's Communicator magazine for May-June is published.

View or download HERE

World Telecommunication and Information Society Day

Saturday 17 May is World Telecommunication and Information Society Day.

World Telecommunication and Information Society Day is an international day proclaimed in November 2006 by the International Telecommunication Union. Prior to that it was known as World Telecommunication Day.

The World Telecommunication and Information Society Day is one of the three days in the year on which we can use the AX prefix on our call signs.

Find Out more about World Telecommunication and Information Society Day **HERE**

Killing Drones with HF - and creating QRM!

The British Army has tested an invisible radio wave weapon, known as the Radiofrequency Directed Energy Weapon (RFDEW), to knock out drone swarms for the first time.

British soldiers have successfully tracked, targeted, and defeated swarms of drones in the latest trial of a new directed energy weapon developed in the UK.

Read the full story **HERE**

Update on the WIA 40 metre Band Plan Review

There hasn't been any news of the 40 metre Band Plan review initiated by the WIA and tabled at the IARU Region 3 Conference last November. The folk from the save40metrescw campaign asked for an update.

In short. No change for now. Region 3 member societies (39 of them) need to be consulted. This could take a while. Read more **HERE**

RASA RBN Node Being Serviced

Recently there have been a series of Reverse Beacon Network outages at VK3RASA in Gippsland Victoria. The problem was traced to an unstable UPS for the Station computer. Normal operation should now be restored.

We are aware that many VK and DX operators regularly check the Reverse Beacon Network for DX activity and propagation indications and we appreciate the feedback provided by operators when it has gone offline. There are very few RBNs in this part of the world and the RBN network benefits from its presence. It is RASA's intention to continue to maintain the station in good order as a public service for all Amateurs. The donations that RASA receives from members and others directly fund initiatives such as the RBN, VK3RASA.

GOATS - Get Out And Try Something

by Bob Bristow VK6POP
From an email summary by Rob VK6LD

The Southern Electronic Group's Get Out And Try Something (GOATS) activity afternoon took place just before Easter at the Lower King boat ramp near Albany Western Australia, overlooking the beautiful Oyster Harbour.

If you don't know where Albany is, the maidenhead locator is OF85xa, and you should make plans to visit some of the most wonderful coastline in the country.

A small group turned up with radios, antennas, teas, coffee and sausage rolls. A perfect combination for a good afternoon.

The attendees were Bob VK6POP, Dave VK6AI, Chris VK6KA and Rob VK6LD. The weather was good (by Albany standards) with mostly blue skies and a light easterly breeze.

During the afternoon we were joined by several curious onlookers, who were interested in what we were doing and we gave them information about Amateur Radio while they listened to the radio.

Dave had his magnetic loop setup (mistaken for a religious cross) with IC706 transceiver, Bob had a 20M end fed half wave vertical on a squid pole and Xiegu X6100 transceiver and Rob's setup was a 40M end fed half wave tied off to a tree and IC705 transceiver.

We had a listen around on 20M, 15M & 10M to start with, most activity

was on 20M with a very low noise floor at the boat ramp. There was plenty of east coast VK working into Europe.

Activity then QSY'ed to 40M and we had some contacts with VK6 stations in Perth, with signals 5x9 on receive and 5x5 – 5x7 on transmit using 10W PEP. Thanks to all who were waiting patiently for us to appear on 7148 KHz, but we got distracted with the local onlookers, drinking cups of tea and Chris cooked up some sausage rolls as well.

Rob said that next time he probably shouldn't pack so much radio equipment and spares because you only need one of everything, don't you? He said he would definitely include a CW key and not park so close to the only tree in the park, so he can run the antenna wire out fully. The wire was draped over a branch on the tree and tied off to a chair on the ground.

Dave may be looking for a bigger battery to run his IC706 for longer, as the small gel cell didnt make the distance.

Overall it was socially pleasant, the weather was perfect, and we got to play with our toys. That's always good. The group certainly had an enjoyable afternoon; two hours flew by so quickly and everyone agreed that it is an activity worth doing again, trying different locations around the region.

The Southern Electronics Group has members located over the South West and Great Southern regions of Western Australia.

New members are welcome.

The SEG website is https://www.hamradio.org.au/

WRASAW
BEING HEARD IS IMPORTANT
The Radio Amateur Society of Australia

UTC and GMT

By Bob Bristow VK6POP

Do you struggle with the twenty four hour clock, and get confused when reference is made to UTC and GMT? What do those things even mean?

Read on to unravel the meanings of those two time standards.

Firstly, to be able to understand and use UTC and GMT, you need to understand the twenty four hour clock, and the offset of different time zones. So without any explanation yet of what or how UTC and GMT are, let's just accept that both indicate the time at the prime meridian, zero degrees longitude, which is at Greenwich in London, England.

This principle is important, because timezones everywhere else are expressed as relative to Greenwich Mean Time. If the timezone is East of Greenwich, the offset is positive, and West it's negative. That is because the world turns, and time is more or less measured by the sun. That explanation would raise a technical eyebrow or two, but let's just leave it at that for a minute, and talk about what the time looks like in the twenty four hour format.

The twenty four hour clock marks the day by beginning at 0000 hours, which is midnight, and is expressed as zero hundred hours, then begins counting. One AM is 0100, commonly expressed as zero 100 hours, and so on. Noon is twelve hundred hours, 6pm is eighteen hundred hours, and so on until we reset to zero hundred at midnight.

You need to note that "zero one hundred" isn't a 4 digit number. Nor is it a base ten number. It's two numbers expressed alongside each other. From the left, the first two digits range from 00, (zero zero) to 24, marking the hours of the day. 1200 is twelve noon.

The second two digits range from 00 to 60, marking the minutes. 1230 is thirty minutes after noon.

A third set of two digits can be used, if desired, zero to sixty, to count seconds. 123025 is twenty five seconds after twelve thirty PM.

Now let's look at how local time is set.

Where I live, in VK6, our time zone is Western Australian Standard Time, which is GMT plus eight hours. So when it's midnight Greenwich Mean Time, eg zero hundred hours, it's zero plus eight here in WA, which is zero eight hundred hours. If it's 1200 GMT, it's 12 plus 8, that's 2000 hours local. Simple arithmetic, simply add eight hours to whatever GMT is, and you get our local time. If that takes you past

midnight, zero hundred hours, just keep on counting. 2200 GMT becomes 0600 the next day here in VK6.

I suggest you start thinking in the twenty four hour clock format for everything, and it becomes second nature. Try setting your watch, car clock, TV, computer, whatever you can, to the 24 hour format. You'll soon catch on. Now for those whose brow has been creasing over the GMT Sun time thing, let me briefly explain.

Firstly, Greenwich Mean Time isn't a time standard, it's a time zone. Let me run that by you again - Greenwich Mean Time isn't a time standard, it's a time zone.

Greenwich Mean Time is the yearly average (or 'mean') of the time each day when the Sun crosses the Prime Meridian at the Royal Observatory in Greenwich.

Because the Earth isn't perfectly round, and because it wobbles as it rotates, the mean time can go off ever so slightly over a period of time, requiring adjustment.

Wobbly time simply won't do, so along comes Universal Coordinated Time, known as UTC.

There are actually two main components to the Universal Coordinated Time standard. Those are the International Atomic Time and Universal Time.

TAI or International Atomic Time is a scale that helps determine the speed at which clocks should tick. It is found by combining the time of more than 200 atomic clocks located worldwide. In other words, it's pretty accurate.

UTC or Universal Time is determined by the Earth's rotation. Because of that fact, it is also sometimes called astronomical or solar time. It is what timekeepers use to measure the length of a single day on the planet.Thanks to these two elements UTC is used to synchronize clocks in various countries all over the world, across twenty four different time zones.

Universal Time was actually created during the Washington Meridian Conference held in 1884. This is when the idea of a 24-hour time zone - a concept we currently use - came into fruition and became adopted widely.

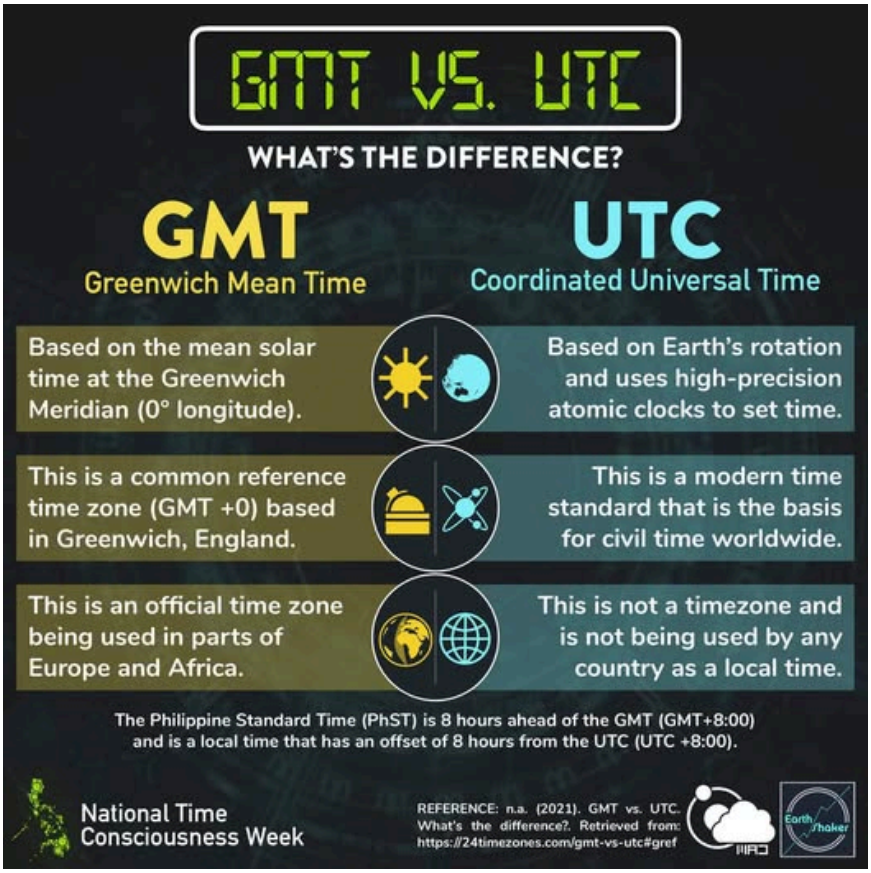
Before that time, Greenwich Mean Time or GMT was actually the world standard. However, it wasn't until 1960, that the International Radio Consultative Committee came up with the concept of Coordinated Universal Time. Just a year later, in 1967, it was officially adopted as the primary timekeeping standard.

Greenwich Mean Time is not considered a standard anymore yet it is the label of one of the 24 total time zones on Earth, used by countries in Africa, Western Europe and the UK (during the winter season).

In Amateur Radio, UTC and the twenty four hour clock make it easy for us to record QSOs, start and end contests, make skeds at an agreed time, and so forth. As long as you remain aware of your offset from UTC, you know where you are.

Ships used to use a chronometer set to Greenwich Mean Time as part of their navigation calculations.

Pictured right is a maritime chronometer from HMS Beagle.



Adapted from an item written by me for broadcast on NewsWest in 2021

Acknowledgement: Wikipedia and other internet resources

Learning Resources for Beginners

Foundation Level Study Guide

The fLSG is a free publication for newcomers to the hobby. The study guide is based on the Foundation level syllabus set by the ACMA. The Foundation Level Study Guide is available as a PDF **HERE**

Welcome to Amateur Radio Guide

The RASA Welcome to Amateur Radio guidebook provides an introduction to our hobby for newly licenced Foundation class amateurs.

The book is published digitally. It contains many hotlinks to external websites with useful information.

It is available as an Acrobat pdf file suitable for reading on a PC or tablet. It can be printed if required.

Available **HERE**